

## ABSTRACT

It is to provide a vapor phase growth apparatus which can perform vapor phase growth of a thin film having a good uniformity throughout a surface of a wafer. The vapor phase growth apparatus includes at least a sealable reactor, a wafer containing member (wafer holder) installed within the reactor and having a wafer mounting portion (pocket hole) on a surface thereof for holding a wafer, a gas supply member (gas inlet pipe) for supplying raw material gas towards the wafer, a heating member (heater) for heating the wafer, and a heat uniformizing member (susceptor) for holding the wafer containing member and uniformizing heat from the heating member, wherein raw material gas is supplied into the reactor in a high temperature environment while heating the wafer by using the heating member via the heat uniformizing member and the wafer containing member, to form a film grown on a surface of the wafer, and wherein a recess portion depressed in a dome shape is formed at a back side of the wafer containing member.